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canc.* an optoelectronic device mounted on said lower substrate and inside said through hole; and at least a metallic base plate inserted between said optoelectronic device and said lower substrate and extending beyond the bottom of said through-hole to enhance heat sinking and light reflection.--

Please rewrite claims 16 and 17.

b4 --16. (once amended) The package as described in claim 14, further comprising metal lining coated over the wall of said through hole to enhance light reflection.

17. (once amended) The package as described in claim 14, further comprising at least two metallic base plates inserted between said optoelectronic device and said lower substrate to enhance light reflection.--

REMARKS

Claims 1-6 and 13 have been canceled. Claims 7, 9, 14 and 16-17 have been rewritten. Claims 8, 10-12, 15, and 18-19 remain unchanged.

The Examiner rejected claims 2-4, 6, 9-11, 15, 16 and 18-19 under 35 U.S.C 102(e) as being unpatentable over Sasano U.S. Patent 6,313,525), previously cited. Claims 2-4 and 6 have been canceled. "Sasano discloses in Fig. 4 a method of for fabricating a focusing cup...comprising the steps of forming a through-hole in an upper insulating substrate layer b ...over a lower insulating substrate ...". However, Sasano did not disclose metal plate or plates between the insulating layers under the LED for heat sinking. This feature is claimed in claims 7 and 14 (as described in the following paragraph), to which claims 9-11 and claims 15-9 depend, respectively. It is believed that when claims 9-11, 15-16 and 18-19 are amended to depend on the rewritten claims 7 and 14, claims 9-11, 15-16 and 18-19 are no longer unpatentable as will be explained in the following paragraph.

The Examiner rejected claims 7, 14 and 17 under 35 U.S.C 103(a) as being unpatentable over Sasano as applied to claim 1 above, and further in view of Komoto et al.(U.S.6,340,824) Komoto disclosed a reflecting cup for reflecting light. Nowhere did he disclose a metal plate extending beyond the bottom of the cup for heat sinking. Thus by limiting claims 7 and 14 with the metal plate extensions beyond the bottom of the cup, it is believed that claims 7 and 14 are no longer unpatentable over Sasano in view of Komoto. It follows that the dependent claims 8-12 of claim 7 and the dependent claims 15-19 of claim 14 are also no longer unpatentable.

The Examiner rejected claims 8 and 12 under 35 U.S.C. 103(a) as being unpatentable over Sasano as applied to claim 8 above, and further in view of Kamizato et al. (U.S.5,642,373). "Kamizato discloses ...that folding the light generated region gives more power optical output.", but did not disclose the

folding of the leads to increase heat sinking. Therefore, it is felt that Kamizato's disclosure is irrelevant. Since claims 8 and 12 is dependent on the rewritten claim 7, it is believed that claims 8 and 12 are no longer unpatentable.

In view of the above, it is submitted that claims 7-12 and claims 14-19, as amended, are in condition for allowance. Reexamination of the rejections is requested. Allowance of claims 7-12 and claims 14-19 at an early date is solicited.

Respectfully submitted,

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In re application of:

Bily WANG

Serial No. 09/922,688

Examiner: FARAHANI, Dana

Filed: Aug. 7, 2001

For: FOCUSING CUP IN A STACKED SUBSTRATE

AMENDMENT (marked-up version)

Commissioner of Patents
Washington, D.C. 20231

Sir:

In response to USPTO communication dated Oct.2, 2002, please amend the application as follows:

IN THE CLAIMS:

Please cancel claims 1-6.

Please rewrite claim 7 as follows:

--7. (twice amended) A method for fabricating a focusing cup for an optoelectronic device package comprising the steps of:

forming a through hole in an upper insulating substrate, wherein said through hole is of conical shape;

stacking said upper insulating substrate over a lower insulating substrate; and

mounting an optoelectronic device on said lower substrate inside said through hole; and

[further comprising a step of] inserting at least a metallic plate between said optoelectronic device and said lower substrate extending beyond the bottom of said cup to enhance heat sinking and light reflection .--

Please rewrite claim 9 as follows:

--9 (twice amended) The method as described in claim [1] 7, further comprising the step of lining the wall of said through hole with metal coating to enhance light reflection.--

Please cancel claim 13.

Please rewrite claim 14 as follows:

--14. (twice amended) A package for optoelectronic device comprising:
an upper insulating substrate;
a lower insulating substrate;

a through hole in said upper insulating substrate;
an optoelectronic device mounted on said lower substrate and inside said through hole; and
[The package as described in claim 13, further comprising] at least a metallic base plate inserted between said optoelectronic device and said lower substrate and extending beyond the bottom of said through-hole to enhance heat sinking and light reflection.--

Please rewrite claims 16 and 17.

--16. (once amended) The package as described in claim [13] 14, further comprising metal lining coated over the wall of said through hole to enhance light reflection.

17. (once amended) The package as described in claim [13] 14, further comprising at least two metallic base plates inserted between said optoelectronic device and said lower substrate to enhance light reflection.--

REMARKS

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Hung Chang Lin

(Signature)

Oct. 24, 2002

(Date)